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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/247,525	02/10/1999	MASAKI HAYASHI	102731	7732

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OLIFF & BERRIDGE, PLC
P.O. BOX 19928
ALEXANDRIA, VA 22320

EXAMINER

TRAN, NHAN T

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 07/28/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/247,525

Applicant(s)

HAYASHI, MASAKI

Examiner

Nhan T. Tran

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1 - 8 have been considered but are moot in view of the new ground(s) of rejection.

In addition, with respect to the Applicant's argument on page 11 for claim 5, the Applicant asserts that Mizoguchi does not teach or suggest a relationship between the continuous photographing speed and the compression factor. In response, the Examiner respectfully disagrees with the Applicant. Mizoguchi clearly shows in Figs. 1, 4(b) & 6(a), col. 5, lines 52-56 wherein the relationship between the continuous shooting speed and the compression ratio is displayed, e.g., compression ratio of standard mode (S) is set for continuous speed of 1/60s and compression ratio of high-picture-quality mode (F) is set for continuous speed of 1/15s.

In view of the above, the Examiner believes that the present claimed invention does read on the cited references at least for the reasons discussed above and as stated in the following Office Action.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 4 & 6 – 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parulski et al. (US 5,493,335).

Regarding claim 1, Parulski discloses an electronic camera having a continuous shooting function (see fig. 1, burst 88c), comprising:

an image capturing unit (CCD 28) that captures a subject image (see fig. 1);

a setting unit (14 with control switches 88a-88f) that sets operating parameters related to image processing performed during image capturing (see fig. 1);

a resolution conversion unit that performs resolution conversion on image data of an image captured by the image capturing unit in correspondence to a resolution set at the setting unit (see col. 2, lines 32-38);

an image compression unit that performs image compression on image data converted by the resolution conversion unit in correspondence to a compression factor set at the setting unit (see col. 5, lines 8-10, lines 34-40 & line 65 to col. 6, line 3 wherein optional levels of compression maybe selected for all resolutions).

a continuous shooting unit that performs continuous shooting of a subject image by continuously driving the image capturing unit, the resolution conversion unit and the image compression unit (see fig. 1, col. 5, line 63 - col. 6, line 3); wherein:

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the resolution conversion unit is capable of performing resolution conversion at least at high resolution (full resolution) and at a low resolution (reduced resolution) that is lower than the high resolution (see col. 2, lines 32-38)

the image compression unit is capable of performing image compression at least at a low compression factor and at a high compression factor that is higher than the low compression factor (see col. 5, lines 8-10 for optional compression levels);

when the continuous shooting unit executes continuous shooting, the image compression unit inherently performs image compression at the high compression factor if the resolution at the resolution conversion unit is set to the low resolution (see col. 5, line 65 – col. 6, line 1).

Parulski does not expressly disclose that the image compression unit is capable of performing image compression at the low compression factor when the resolution at the resolution conversion unit is set to low resolution. However, Parulski clearly suggests that further input for selecting levels of compression may be provided in the camera as shown in col. 5, lines 8-10, and Parulski also teaches the compression unit (DSP 64) that is designed to be programmable in which variety of compression modes may be implemented in the camera as shown in col. 7, lines 28-31, 36-41.

Someone would motivate to enhance the camera capability by providing optional inputs for selecting levels of compression and by programming the compression unit suitable to handle variety of compression factors corresponding to variety of resolution modes.

Therefore, it would have been obvious to one of ordinary skill in the art to enhance the camera in Parulski by implementing optional compression level inputs and/or reprogramming the compression unit that is able to handle variety of compression factors corresponding to variety of

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resolution modes for any combination of resolution and compression factor scheme, for example, selecting low compression factor when the resolution at the resolution unit is set to low resolution and also when the continuous unit executes continuous shooting, the image compression unit performs image compression at the high compression factor if the resolution at the resolution conversion unit is set to the low resolution, thereby a camera having high capability of resolution conversions and compression levels is realized to meet user's demands for both image resolution and compression.

Regarding claim 2, an instruction unit that issues instructions to ensure that the resolution conversion unit performs resolution conversion at the low resolution and the image compression unit performs image compression at the high compression factor, without having to change settings for the resolution and the compression factor that have been set by the setting unit (see col. 7, line 28 for programmable compression unit and the analysis in claim 1; also see col. 5, line 63 - col. 6, line 3 & 63-67), is provided; and

when the continuous shooting unit executes continuous shooting, the resolution conversion unit performs resolution conversion at the low resolution and the image compression unit performs image compression at the high compression factor in conformance to instruction issued at the instruction unit (also see col. 7, line 28 for programmable compression unit and the analysis in claim 1, and col. 5, line 63 - col. 6, line 3 & 63-67).

Regarding claim 3, the claimed limitations are accommodated with respect to claim 1.

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Regarding claim 4, the claimed limitations are accommodated with respect to claim 2.

Regarding claim 6, the claimed limitations are accommodated with respect to claim 2.

Regarding claim 7, the claimed limitations are accommodated with respect to claim 1.

Regarding claim 8, the claimed limitations are accommodated with respect to claim 2.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Parulski et al. (US 5,493,335) in view of Mizoguchi (US 6,407,772).

Regarding claim 5, Parulski discloses all the limitations of claim 5 except for disclosing the setting unit is capable of setting a continuous shooting speed at the continuous shooting unit at least at a normal speed and at a high speed that is higher than the normal speed. However, such a configuration is well known in the art for the user to select an appropriate continuous

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speed corresponding to available memory in the storage device as suggested by Mizoguchi in figs. 1, 4(b) & 6(a); col. 3, lines 5-9; col. 2, lines 26-35 & col. 5, lines 52-56.

Therefore, it would have been obvious to one of ordinary skill in the art to modify Parulski with Mizoguchi by reconfiguring of setting a continuous shooting speed at the continuous shooting unit at least at a normal speed and at a high speed that is higher than the normal speed as taught by Mizoguchi into the continuous shooting function disclosed by Parulski for the user to select an appropriate continuous speed corresponding to available memory in the storage device.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (703) 605-4246. The examiner can normally be reached on Monday - Friday, 8:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew B Christensen can be reached on (703) 308-9644. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

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NT.

July 27, 2003

A handwritten signature in black ink, appearing to read 'A. Christensen', with a long horizontal flourish extending to the right.

ANDREW CHRISTENSEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600